S175

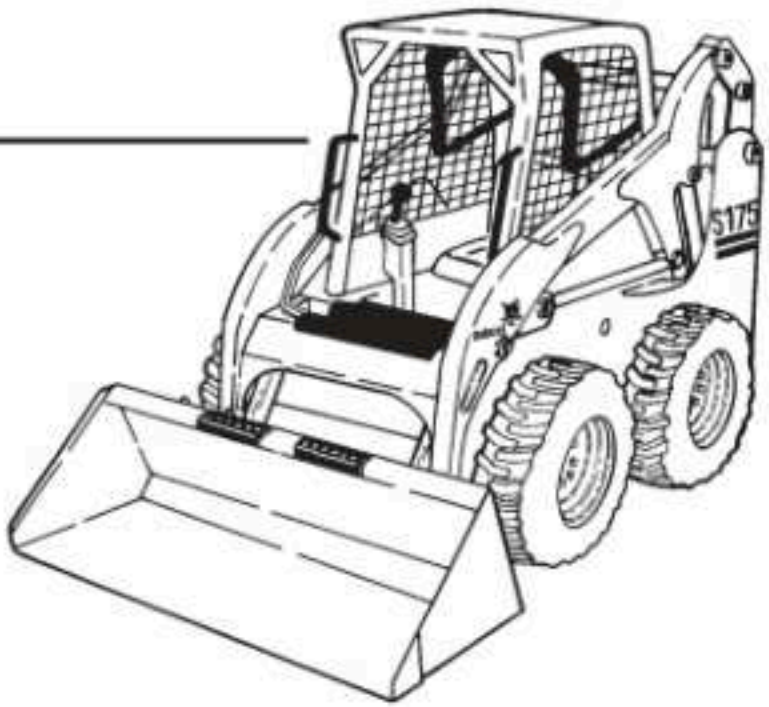
S175

HIGH FLOW

Bobcat®

Operation & Maintenance Manual

S/N 517625001 & Above
S/N 518115001 & Above



EQUIPPED WITH
BOBCAT INTERLOCK
CONTROL SYSTEM (BICS™)

6901827 (1–03) Revised (4–03) (5)

An IR Ingersoll-Rand business

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CALIFORNIA
PROPOSITION 65 WARNING
Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects and other reproductive harm.

REFERENCE INFORMATION

Write the correct information for YOUR Bobcat loader in the spaces below. Always use these numbers when referring to your Bobcat loader.

Loader Serial Number ..... _____

Engine Serial Number ..... _____

_____

_____

_____

NOTES: _____

_____

_____

_____

_____

_____

YOUR LOADER DEALER: _____
ADDRESS: _____
PHONE: _____

Bobcat Company
P.O. Box 128
Gwinner, ND 58040–0128

Bobcat Company Europe
J. Huysmanslaan 59
B–1651 LOT
BELGIUM

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HYDRAULIC CONTROLS

Put your feet on the pedals (or footrests) and KEEP THEM THERE any time you operate the loader.

Two foot pedals (or hand controls) (Item 1) **[A]** and **[B]** control the hydraulic cylinders for the lift and tilt functions.

Foot Pedals

Lift Arm Operation [A]

The left pedal controls the lift arms.

Push on the bottom (heel) (Item 2) **[A]** of the pedal to raise the lift arms.

Push on the top (toe) (Item 3) **[A]** of the pedal to lower the lift arms.

Lift Arm Float Position [A]

Push the top (toe) (Item 3) **[A]** of the pedal all the way forward until it locks into the *float* position.

Use the *float* position of the lift arms to level loose material while driving backward.

Push the bottom of the left pedal to unlock from the *float* position.

Tilt Operation [B]

The right pedal controls the bucket.

Push the bottom (heel) (Item 2) **[B]** of the pedal to tilt the bucket backward.

Push the top (toe) (Item 3) **[B]** of the pedal to tilt the bucket forward.

Hand Controls (If Equipped)

Lift Arm Operation [A]

The left hand lever controls the lift arms.

Move the left hand lever away from the operator (Item 4) **[A]** to raise the lift arms.

Move the left hand lever toward the operator (Item 5) **[A]** to lower the lift arms.

Lift Arm Float Position [A]

To Engage: Press and hold the Float Button (Item 6) **[A]** while the lever is in neutral. Move the lever to the lift arm down position (Item 5) **[A]**, then release the button.

To Disengage: Press Float Button again or move the lever to the lift arm up position (Item 4) **[A]**.

Use the *float* position of the lift arms to level loose material while driving backward.

Move the left hand lever upward to unlock from the *float* position.

Tilt Operation [B]

The right hand lever controls the bucket.

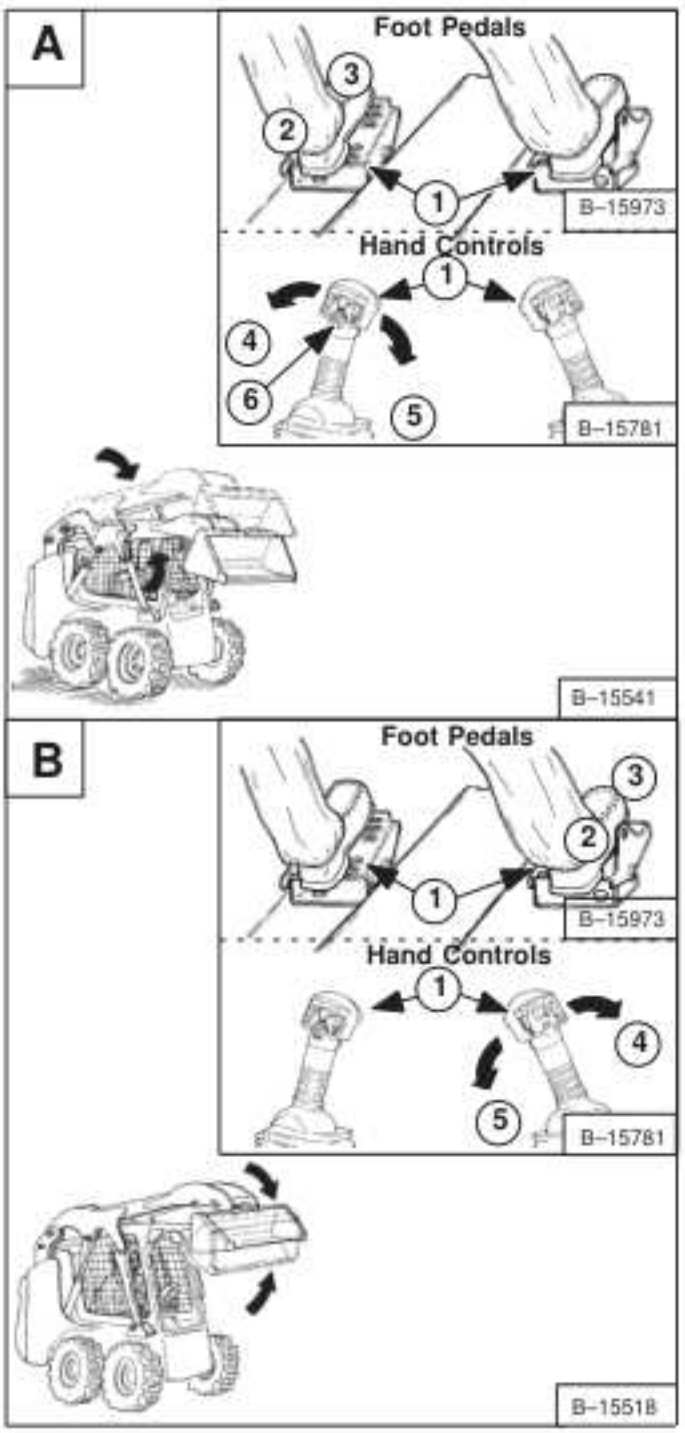
Move the right hand lever toward the operator (Item 5) **[B]** to tilt the bucket backward.

Move the right hand lever away from the operator (Item 4) **[B]** to tilt the bucket forward.

⚠ WARNING

Keep both feet on pedals or footrests while operating machine. Failure to do so can cause serious injury.

W-2359-1099



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HEATING SYSTEM

Cleaning and Maintenance

The heating system requires regular inspection and maintenance. (See *SERVICE SCHEDULE*, Page 39 for intervals.)

Filters – The *Fresh Air Filter* is located below the rear window of the cab (Item 1) **[A]**.

Remove the bolts and remove the filter housing.

Shake the filter or use low air pressure to remove dirt.

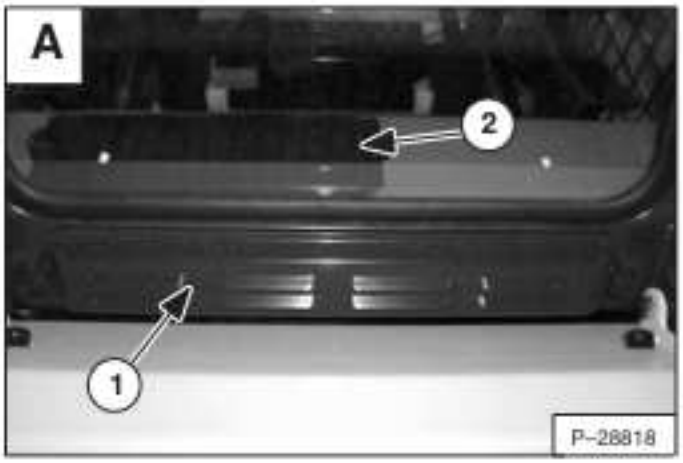
Reinstall the filter and housing.

The *Recirculation Filter* is located in front of the rear window inside the cab (Item 2) **[A]**.

Remove the clamping knobs, grill and filter.

Clean the filter with water and mild detergent. Reinstall the filter.

Troubleshooting – If the fan does not run, check the fuse (See *ELECTRICAL SYSTEM*, Page 58.)



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SKID STEER LOADER SPECIFICATIONS (Cont'd)

Performance

Rated Operating Capacity (SAE)	1750 lbs. (794 kg)
Rated Operating Capacity (SAE) With Counterweight	1850 lbs. (839 kg)
Tipping Load (SAE)	3900 lbs. (1769 kg)
Operating Weight (SAE)	5808 lbs. (2635 kg)
Travel Speed:	7.0 MPH (11,3 km/hr)
SAE Breakout Force – Lift	3600 lbf. (16014 kg)
SAE Breakout Force – Tilt	3550 lbf. (15791 kg)
Axle Torque	4700 lbf. (6373 kg)

Engine / Electrical

Make / Model	Kubota / v2203–EB
Fuel / Cooling	Diesel / Liquid
Horsepower (SAE Net)	46 HP (34 kW)
Maximum Governed RPM	2800 RPM
Torque @ 1800 RPM (SAE Net)	107 LBF–FT (145 Nm)
Number of Cylinders	4
Displacement	134 cu. in. (2,2 L)
Bore / Stroke	3.43 / 3.64 inches (87,0 / 92,4 mm)
Lubrication	Pressure System with Filter
Crankcase Ventilation	Open
Air Cleaner	Dry replaceable paper cartridge with safety element
Ignition	Diesel Compression
Engine Coolant	Propylene glycol / water mixture (53% PG / 47% water)
Starting Aid	Glow Plugs
Alternator	Belt driven; 90 amps, Open
Battery	12 Volt; 600 cold cranking amps @ 0° F (–18° C) 115 minute reserve capacity
Starter	12 volt; gear reduction type; 4.02 HP (3,0 kW)
Low Idle Speed	1125–1175 RPM
High Idle Speed	2860–3000 RPM

Hydraulic System

Pump Type	Engine driven, gear type
Pump Capacity Standard High Flow Option	 16.7 GPM (63 L/min) @ 3000 RPM 27.0 GPM (102 L/Min) @ 3000 RPM
System Relief At Quick Couplers	3250–3350 PSI (224–231 BAR)
Hydraulic Filter	Full flow replaceable, 3 micron synthetic media element
Control Valve	3–Spool, open center type with float detent on lift and electrically controlled auxiliary spool

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BEFORE OPERATING THE BOBCAT LOADER

Safety Alert Symbol

This symbol with a warning statement means: "Warning, be alert! Your safety is involved!" Carefully read the message that follows.

WARNING

Operator must have instructions before operating the machine. Untrained operators can cause injury or death.

W-2001-0502

The Bobcat loader and attachment must be in good operating condition before use.

Check all of the items on the Bobcat Service Schedule Decal under the 8–10 hour column or as shown in this Manual.

IMPORTANT

This notice identifies procedures which must be followed to avoid damage to the machine.

I-2019-0284

SAFE OPERATION NEEDS A QUALIFIED OPERATOR *

A QUALIFIED OPERATOR MUST DO THE FOLLOWING:

- **UNDERSTAND THE WRITTEN INSTRUCTIONS, RULES AND REGULATIONS**
  - The written instructions from Bobcat Company include the Delivery Report, Operation & Maintenance Manual, Operator's Handbook, Safety Manual and machine signs (decals).
  - Check the rules and regulations at your location. The rules may include an employer's work safety requirements. Regulations may apply to local driving requirements or use of a Slow Moving Vehicle (SMV) emblem. Regulations may identify a hazard such as a utility line.

WARNING

Warnings on the machine and in the manuals are for your safety. Failure to obey warnings can cause injury or death.

W-2044-1285

- **HAVE TRAINING WITH ACTUAL OPERATION**
  - Operator training must consist of a demonstration and verbal instruction. This training is given by your Bobcat dealer before the product is delivered.
  - The new operator must start in an area without bystanders and use all the controls until he can operate the machine and attachment safely under all conditions of the work area. Always fasten seat belt before operating.
  - Operator Training Courses are available from your Bobcat dealer in English and Spanish. They provide information for safe and efficient equipment operation. Safety videos are also available.
  - Service Safety Training Courses are available from your Bobcat dealer. They provide information for safe and correct service procedures.
- **KNOW THE WORK CONDITIONS**
  - Know the weight of the materials being handled. Avoid exceeding the Rated Operating Capacity of the machine. Material which is very dense will be heavier than the same volume of less dense material. Reduce the size of load if handling dense material.
  - The operator must know any prohibited uses or work areas, for example, he needs to know about excessive slopes.
  - Know the location of any underground lines. Call local utilities or the TOLL FREE phone number found in the *SAFETY INSTRUCTIONS* Section of this manual.
  - Wear tight fitting clothing. Always wear safety glasses when doing maintenance or service. Safety glasses, hearing protection or special applications kit are required for some work. See your dealer about Bobcat Safety equipment.

* For an operator to be qualified, he must not use drugs or alcoholic drinks which impair his alertness or coordination while working. An operator who is taking prescription drugs must get medical advice to determine if he can safely operate a machine.

SI02-0502

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